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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,577	02/16/2001	Apurva Kumar	JP920000365US1	4250

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MCGINN & GIBB, PLLC
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EXAMINER

CHO, HONG SOL

ART UNIT PAPER NUMBER

2662

DATE MAILED: 08/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,577

Applicant(s)

KUMAR ET AL.

Examiner

Hong Cho

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it includes the title of the invention.
Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being unpatentable over Salonidis et al, hereinafter referred to as Salonidis.

Re claims 1, 3-5, 8, 10-12, 15, and 17-19, Salonidis discloses the inquired device at inquiry scan state periodically-listening for inquiry message to scan from the inquiring device at inquiry state (paragraph 0019, lines 1-6) and upon reception of the inquiry message, the inquired unit goes to the standby state or sleep mode from inquiry scan state for a predetermined time (*periodically interrupting device discovery activity for a predetermined time period to scan for an inquiry message*, paragraph 0020, lines 4-8).
Salonidis discloses controlling the period of time a unit remains in the sleep mode that will determine when the inquired device to continue its activity again or return to inquiry

state to discover the neighbor devices on expiry of predetermined time period (*returning to device discovery activity on receipt of an inquiry message and upon the end of random time period and processing the inquiry message for a random time period*, paragraph 0046, lines 3-9).

Salonidis further discloses processing inquiry message in accordance with normal procedures in frequency hopping based ad hoc networks (paragraph 0022, lines 1-4).

Salonidis discloses a connection establishment procedure between Bluetooth-enabled devices using a frequency hopping set called an inquiry hopping sequence (*frequency hopping based ad-hoc network is implemented under the Bluetooth defacto standard*, paragraph 0017, lines 1-5).

Re claims 2, 9, and 16, Salonidis discloses modifying predefined time period of inquiry scan for listening inquiries from other devices (*pre-determined time period for scanning is reduced by the reception of inquiry messages from other devices*, paragraph 0045, lines 1-10).

Re claims 6, 7, 13, 14, 20, and 21, Salonidis fails to disclose explicitly time intervals for periodic interruption of device discovery (*once every 2.56 seconds*) and time period to continue interrupted activity again (*less than or equal to 1.28 seconds*). However, those time intervals for periodic interruption of device discovery and time period to continue interrupted activity again can be easily modified by one skilled in the art using program command since Salonidis discloses, as explained in the rejection of claim 1, controlling time periods based on the probability distribution of time.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent (6754250) to Haartsen discloses networking in uncoordinated frequency hopping piconets
- US Patent (5940431) to Haartsen et al discloses access technique of channel hopping communications system
- US Patent (6389057) to Haartsen discloses access technique of channel hopping communications system
- US Patent (6718395) to Ziegler discloses using inquiry response for synchronizing to a communication network
- US (2002/0071477) to Orava discloses wireless devices supporting ad hoc connections independent of the protocol version


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 703-305-0343. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho
Patent Examiner
8-17-2004


RICKY NGO
PRIMARY EXAMINER
